

**U.S. ENVIRONMENTAL PROTECTION AGENCY
FINAL POLREP**

DATE: September 5, 2003

FROM: Art Smith, On-Scene Coordinator
Emergency Response and Removal Branch

TO: Regional Response Center
Polrep Mailing List
Site File

I. GENERAL SITE INFORMATION

Site name: Burke Street Lead Site
Street Address: Jones Lane
City, County, State, Zip Code: Junction City, Boyle County, Kentucky 40440
Site Number: A48L
Response Authority: CERCLA
NPL Status: Non-NPL
Incident Category: Time-Critical Removal Action
State Notification: KYDEP (July 3, 2002)
Memorandum: July 23, 2002; Project Ceiling \$1,068,000
September 20, 2003; Ceiling increase of \$360,000
Start Date: August 6, 2002
Completion Date: March 29, 2003

II. BACKGROUND INFORMATION

Type of facility or site: Mixture of residential properties, undeveloped land, and unimproved right-of-ways with historical disposal of battery parts.

Site Description:

The site consists of two unimproved right-of-ways known as Burke Street and Hope Street, seven adjacent residential properties, and an undeveloped parcel of land in Junction City, Boyle County, Kentucky. Burke Street is approximately 40 feet wide and 950 feet long, and is bound on the west by Cemetery Street and the east by Jones Lane. Hope Street is approximately 40 feet wide and 500 feet long, and is bound to the north by Carl Lane and to the south by Burke Street. The undeveloped property is located east of Jones Lane.

On April 25, 2002, a homeowner in a new subdivision notified the Kentucky Department for Environmental Protection (KYDEP) upon discovering lead-acid battery casings or "chips" in their yard. KYDEP collected samples from the area, which revealed the presence of lead at

greater than 4,000 parts per million (ppm) in soil. On May 6, 2002, KYDEP requested that EPA Region 4 provide assistance in delineating the extent of lead contamination in residential areas.

On May 20, 2002, the EPA OSC and the Region 4 Superfund Technical Assessment and Response Team (START) mobilized to the site and conducted a removal site evaluation (RSE) pursuant to Section 300.410 of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The RSE consisted of a field screening investigation where direct readings for lead in soil were taken at several hundred locations, using a portable x-ray fluorescence (XRF) instrument. The investigation focused primarily on detecting the presence of lead at concentrations exceeding EPA's screening level of 400 ppm in residential areas. In the Initial Polrep, the OSC observed the following conditions which meet criteria established in Section 300.415 of the NCP for determining whether a removal action is appropriate:

1. 300.415 (b) (2) (i) "Actual or potential exposure to nearby human populations, animals or the food chain from hazardous substances or pollutants or contaminants"

The RSE disclosed that there is significant lead contamination, the source of which is primarily located within Burke Street, an "unimproved" between two new subdivisions. The lead contamination is closely correlated with the presence of battery chips, which are found in significant quantities in the Burke St. right-of-way. Lead concentrations in the source area generally range from 2,000 ppm to 10,000 ppm, The maximum lead concentration detected was 89,000 ppm, which was confirmed by laboratory analysis. Lead levels were also found to exceed 400 ppm in the yards at several residences that border Burke St.. Small children reside at two of these homes where battery chips were observed in play areas.

2. 300.415 (b) (2) (iv) "High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate"

Analytical results provided by KYDEP reveal that lead has been transported via soil erosion to a drainage ditch, creating a potential for further migration to off-site locations.

Based on the removal site evaluation, the OSC concluded that the Burke Street Lead Site should be assigned a high priority for conducting a time-critical removal action. This determination was communicated by EPA to the KYDEP, who in turn, formally requested EPA to perform the removal action on July 3, 2002. An Action Memo was prepared and approved on July 23, 2002, which established a removal project ceiling of \$1,068,000 for the site. On September 20, 2002, an increase of \$360,000 in spending authority for the project was requested and received to cover anticipated costs of completing the removal action. The removal project ceiling was increased to a total of \$1,428,000.

3. RESPONSE INFORMATION

Actions Taken:

On August 6, 2002, EPA and the Emergency and Rapid Response Services (ERRS) contractor mobilized to the site marking the start of the removal action. A summary of removal activities completed is as follows:

1. Temporary relocation was provided for two families whose properties were significantly impacted by construction activities. The temporary relocation ended on Oct. 19, when they were moved back into their primary residence.
2. Air monitoring was conducted during site activities.
3. Excavation was completed on seven residential properties, one undeveloped property, and in the Burke Street and Hope Street right-of-ways.
4. The waste characteristic sampling data for the treated material was reviewed.
5. The excavated soils were treated on-site with triple super phosphate to stabilize the lead and 6,259 tons of material was loaded into trucks and transported to the Tri-K Landfill in Stanford, Kentucky.
6. The on-site stabilization system was decontaminated and demobilized.
7. Backfilling and site restoration was completed in all areas.
8. All equipment was decontaminated and demobilized.

Use of Innovative Technologies or Authorities: None

Community Involvement:

A public meeting was held at the Junction City Elementary School on July 2, 2002, to discuss the findings of the removal site evaluation and the future removal action. Another public meeting was held at the Junction City Elementary School on February 27, 2003, to discuss the end of the removal action.

Unusual Circumstances:

Because of heavy rains in late September and early October 2002, work was suspended at the site from October 17 until the last week in November. Wet conditions and winter weather slowed the restoration of the site properties. Final restoration was completed in March 2003. KYDEP contacted the OSC in August 2002 to inquire as to the feasibility of reaching a 50 part per million (ppm) cleanup goal for lead in residential areas. EPA's cleanup objective for this removal action is 400 ppm lead. Subsequent discussions between EPA and KYDEP produced an agreement where EPA would conduct additional removal of soil in portions of residential lots

where excavation was planned, in order to meet KYDEP's criteria. In a letter dated Aug. 23, 2002, KYDEP expressed its commitment to reimbursing EPA for the incremental cost increase. EPA is currently preparing an Interagency Agreement (IAG) for KYDEP to reimburse EPA Region 4 in the amount of \$38,390.69.

Future Considerations:

No additional EPA activities are anticipated at the Burke Street Lead site, since all known threats have been mitigated.

Post Removal Site Control:

Post-removal site control is not required.

9. CONTRACTOR INFORMATION AND ESTIMATED COSTS

Contractor Information:

| Contractor | TDD/DO Number | POP Start | POP End | TDD/DO Amount |
|------------------------|----------------|----------------|------------------|---------------|
| CMC, Inc. | 0204-F4-014 | August 6, 2002 | August 6, 2003 | \$1,065,000 |
| Weston Solutions, Inc. | 4W-02-07-B-001 | July 5, 2002 | October 31, 2003 | \$ 90,000 |
| TOTAL | | | | \$1,055,000 |

Estimated Costs:

Extramural:

| | |
|-------------------|--------------|
| ERRS | \$732,500 |
| START | 86,320 |
| CLP | 21,000 |
| EPIC | 5,000 |
| ERT | <u>1,340</u> |
| Total Extramural: | \$846,160 |

Intramural:

EPA Site-related Direct Costs: \$ 77,000

EPA Site-related Indirect Costs: 447,000

Total Intramural: \$ 524,000

TOTAL SITE COSTS: \$1,370,160

The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

10. DISPOSITION OF WASTES

| Waste Stream | Waste Code | Approximate Volume/ Quantity | Waste Stream Handling Method | Disposal Location |
|----------------------|-----------------------------|---------------------------------|---|--|
| Pb Contaminated Soil | non-hazardous special waste | 6,159 tons | Transportation and Disposal at permitted landfill | Republic Industries' Tri-K Landfill Stanford, KY |

11. ROSTER OF AGENCIES/ORGANIZATIONS ASSISTING IN REMOVAL

| Organization/Agency, Address | Primary Contact | Phone Number | Role/Activity |
|---|-----------------|--------------|-------------------------|
| US EPA Atlanta Federal Center 61 Forsyth St., 11 th floor Atlanta, GA 30303 | Art Smith | 502-582-5161 | OSC |
| CMC, Inc. | Donny Anderson | 859-885-4955 | ERRS Project Manager |
| Weston Solutions, Inc. | Greg Harper | 770-325-7972 | START-2 Project Manager |
| KYDEP Superfund Branch 14 Reilly Road Frankfort, KY 40601 | Mike Blanton | 850-564-6716 | State Contact |